

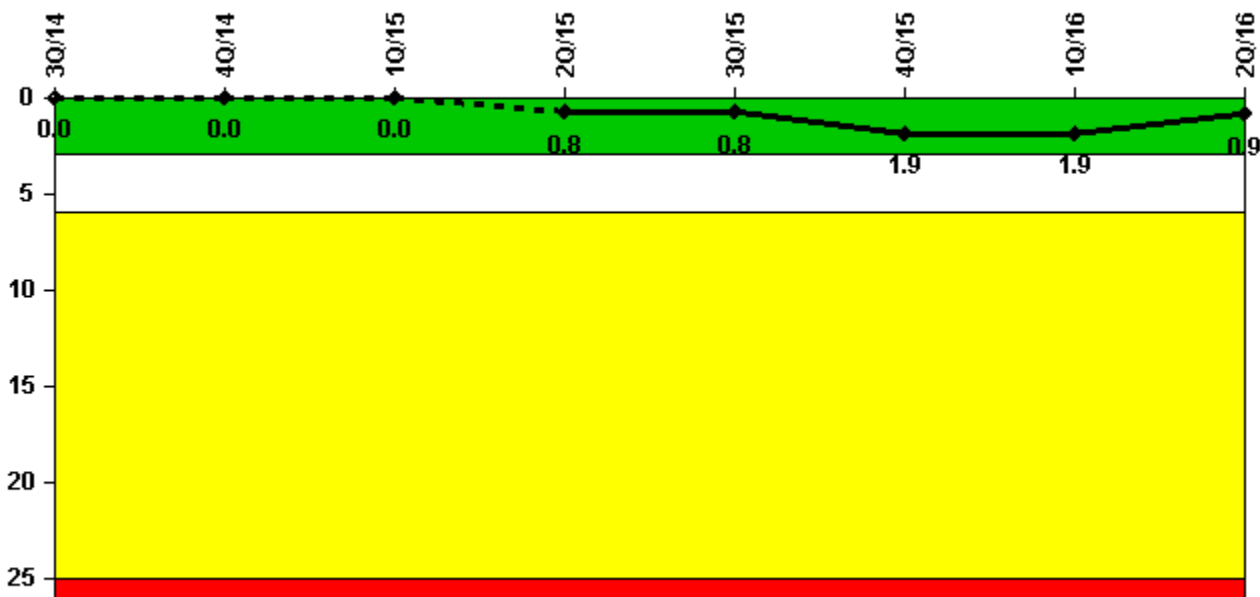
Waterford 3

2Q/2016 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: DEP miss in 2nd Month of 3rd quarter was re-evaluated based on discussion of similar issue identified in evaluated session in 2016 with NRC. The number of successful opportunities was increased to 22.

Unplanned Scrams per 7000 Critical Hrs



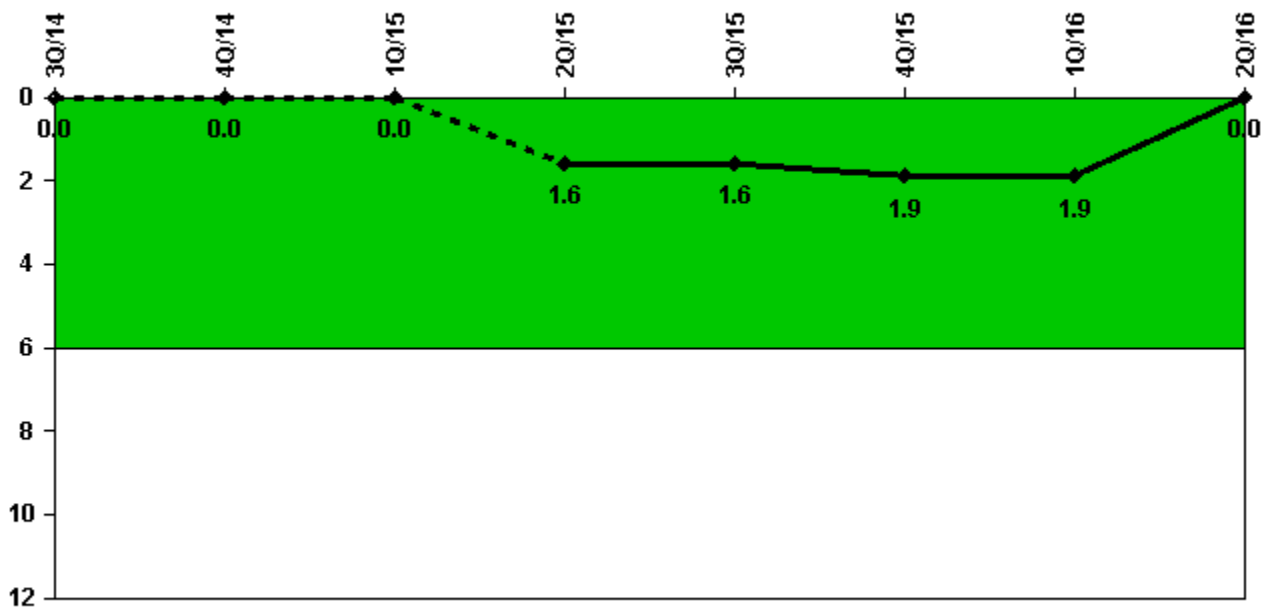
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
Unplanned scrams	0	0	0	1.0	0	1.0	0	0
Critical hours	2208.0	2209.0	2159.0	2079.8	2208.0	929.5	2183.0	2184.0
Indicator value	0	0	0	0.8	0.8	1.9	1.9	0.9

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



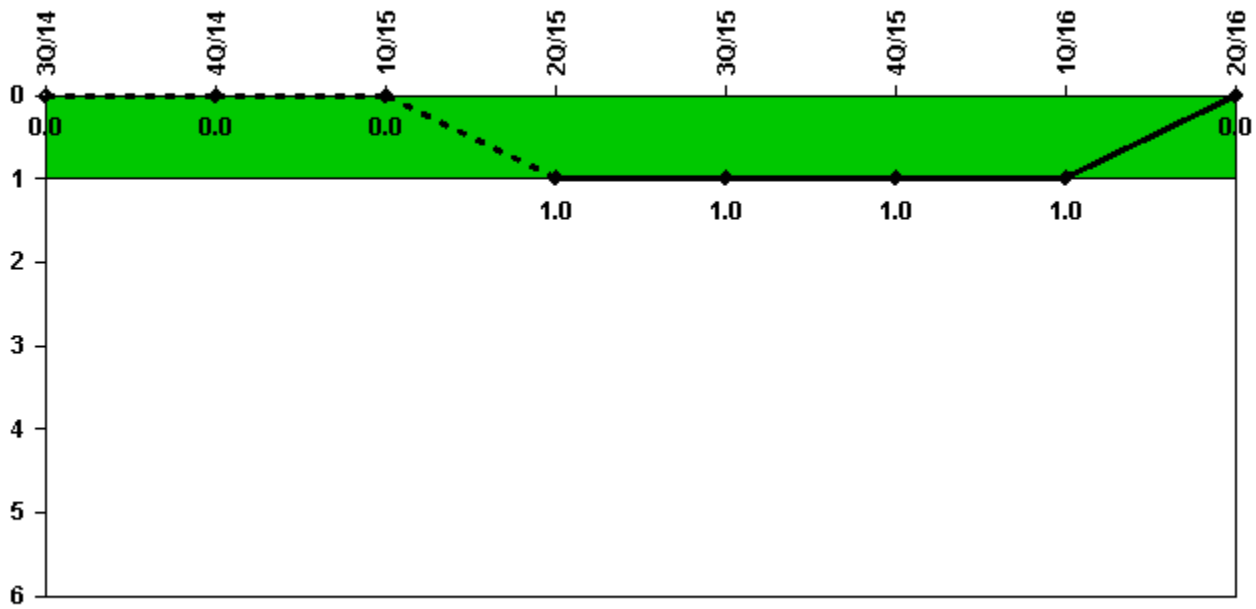
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
Unplanned power changes	0	0	0	2.0	0	0	0	0
Critical hours	2208.0	2209.0	2159.0	2079.8	2208.0	929.5	2183.0	2184.0
Indicator value	0	0	0	1.6	1.6	1.9	1.9	0

Licensee Comments: none

Unplanned Scrams with Complications



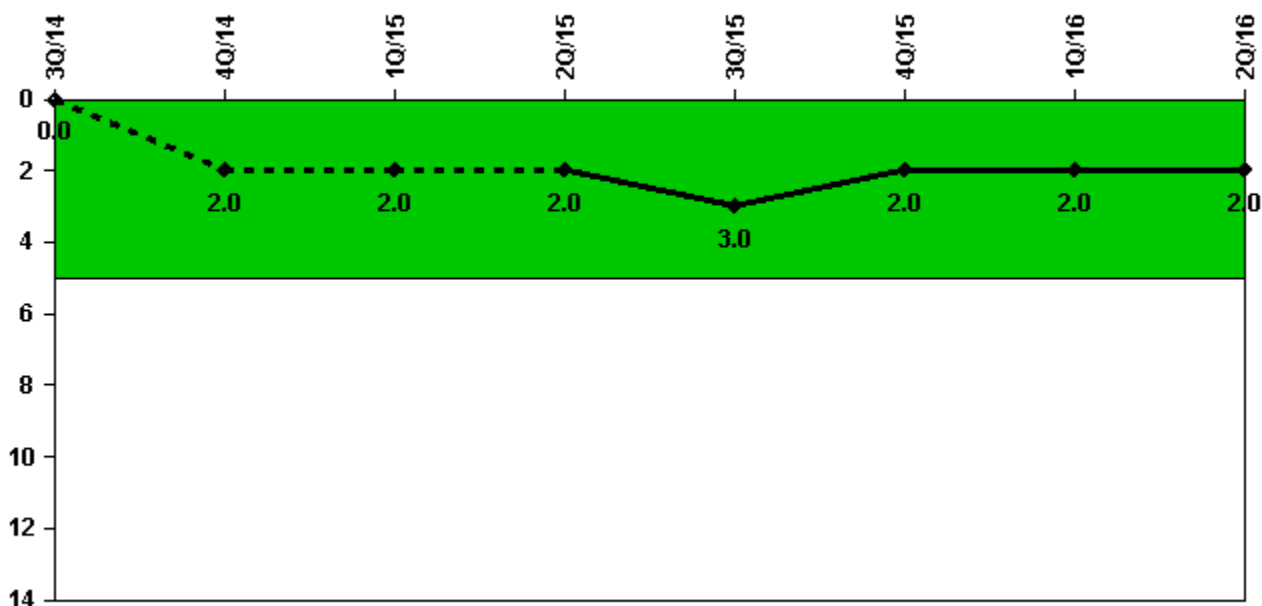
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
Scrams with complications	0	0	0	1.0	0	0	0	0
Indicator value	0.0	0.0	0.0	1.0	1.0	1.0	1.0	0.0

Licensee Comments: none

Safety System Functional Failures (PWR)



Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
Safety System Functional Failures	0	2	0	0	1	1	0	0
Indicator value	0	2	2	2	3	2	2	2

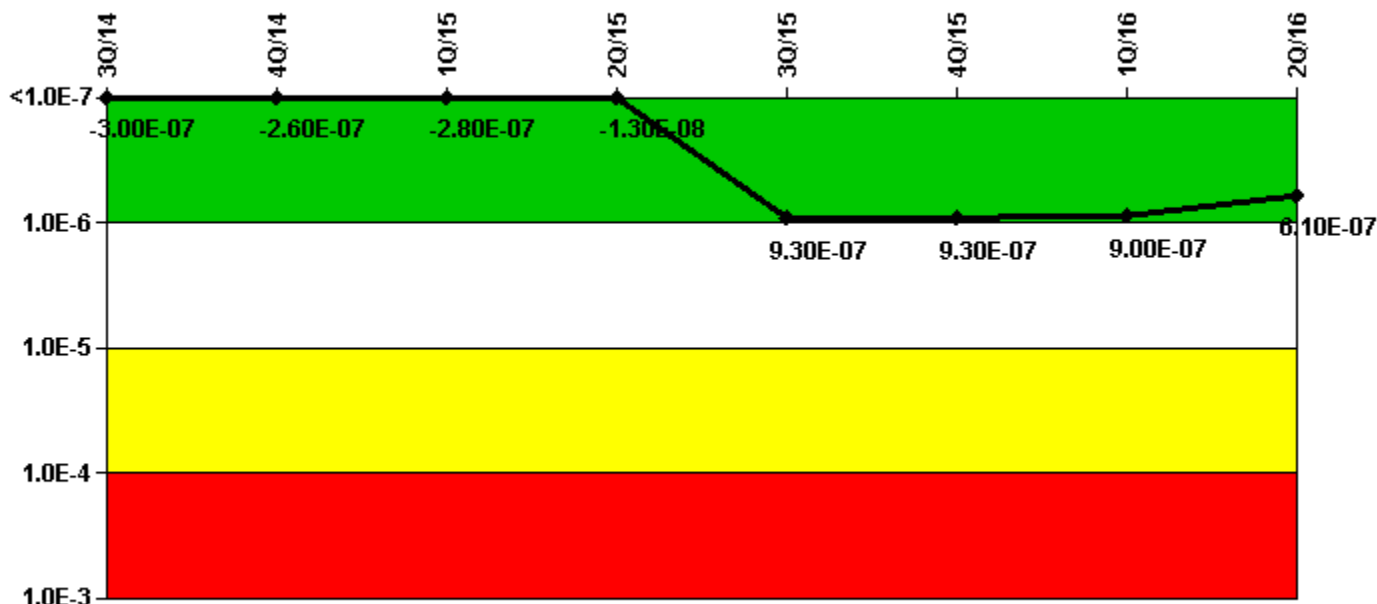
Licensee Comments:

4Q/15: LER 2015-007-00 issued 10/23/2015. On 8/16/2015, Both A & B EDG declared inoperable, entry into TS 3.8.1.1 action f. - EDG A was declared inoperable following a trip on generator differential due to failed current transformer. Then EDG B, which was subsequently started per TS 3.8.1.1 action b(1), was declared inoperable due to exhaust fan not starting when diesel was started then TS 3.8.1.1 action f was entered.

4Q/14: LER 2014-003-00 and LER 2014-004-00 both submitted 4th quarter as SSFF.

3Q/14: LER 2014-003-00 a SSFF was reported in Licensing Event Report LER 2014-003-00. This SSFF was originally reported with 3rd quarter 2014 data submittal for time of occurrence in error. This has been entered into the corrective action program under CR-WF3-2014-6299. The PI color will change from Yellow back to Green.

Mitigating Systems Performance Index, Emergency AC Power System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Emergency AC Power System	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
UAI (ΔCDF)	1.03E-07	1.32E-07	1.15E-07	3.81E-07	5.69E-07	5.71E-07	5.55E-07	7.02E-07
URI (ΔCDF)	-4.04E-07	-3.95E-07	-3.95E-07	-3.95E-07	3.57E-07	3.56E-07	3.49E-07	-9.46E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.00E-07	-2.60E-07	-2.80E-07	-1.30E-08	9.30E-07	9.30E-07	9.00E-07	6.10E-07

Licensee Comments:

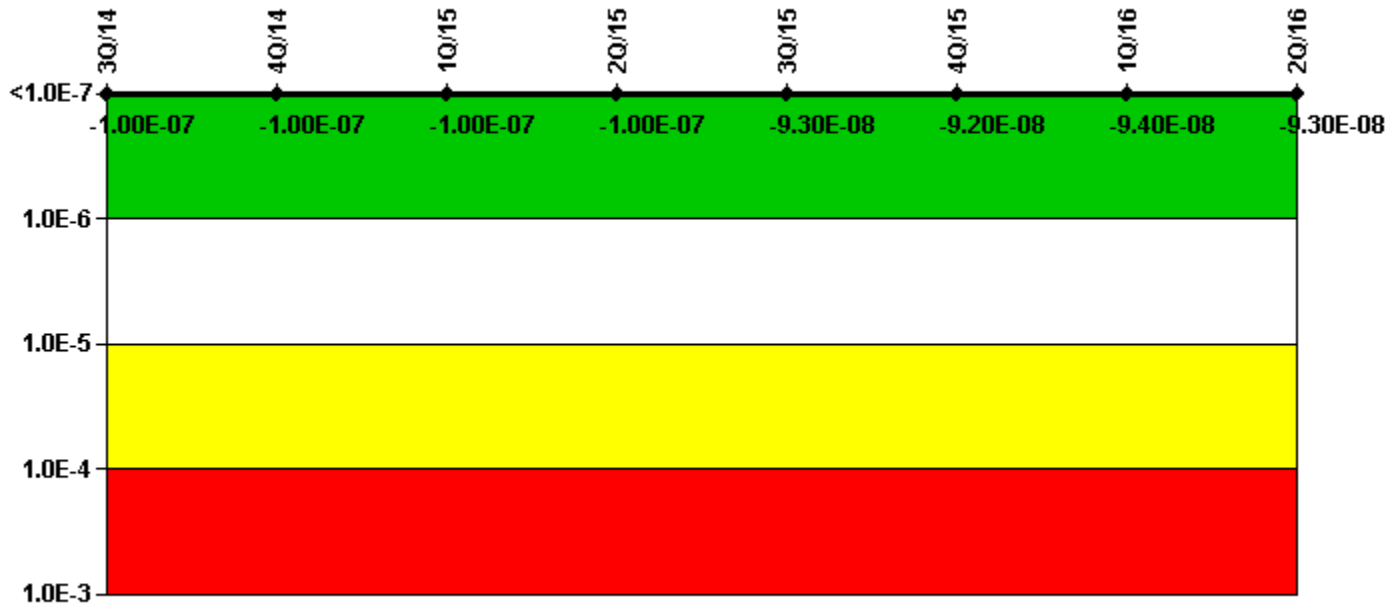
2Q/16: Risk Cap Invoked.

1Q/16: Risk Cap Invoked. The Generic Common Cause Failure (CCF) Factors applied to the Emergency Diesel Generator (EDG) runtime failure Birnbaum were not correct. The incorrect value of 1.0 should be changed to 1.25 per the guidance in NEI 99-02 Rev. 7. Ref. EC-63198.

4Q/15: Risk Cap Invoked.

3Q/15: Risk Cap Invoked.

Mitigating Systems Performance Index, High Pressure Injection System



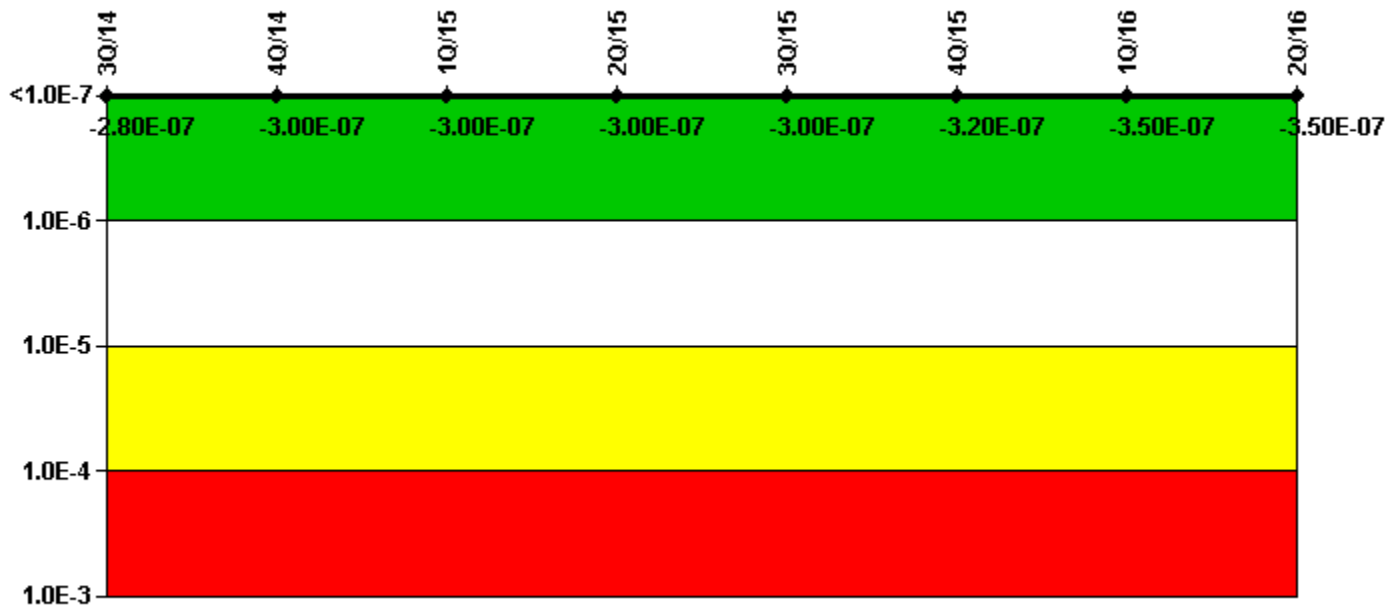
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, High Pressure Injection System	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
UAI (Δ CDF)	-9.58E-09	-9.58E-09	-9.54E-09	-1.01E-08	-3.32E-10	-1.32E-09	-5.11E-09	-4.45E-09
URI (Δ CDF)	-9.18E-08	-9.34E-08	-9.35E-08	-9.24E-08	-9.26E-08	-9.11E-08	-8.93E-08	-8.88E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.00E-07	-1.00E-07	-1.00E-07	-1.00E-07	-9.30E-08	-9.20E-08	-9.40E-08	-9.30E-08

Licensee Comments: none

Mitigating Systems Performance Index, Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Heat Removal System	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
UAI (Δ CDF)	3.32E-08	1.84E-08	1.85E-08	1.92E-08	1.86E-08	5.12E-09	-4.01E-08	-4.03E-08
URI (Δ CDF)	-3.14E-07	-3.19E-07	-3.19E-07	-3.19E-07	-3.21E-07	-3.26E-07	-3.13E-07	-3.13E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-2.80E-07	-3.00E-07	-3.00E-07	-3.00E-07	-3.00E-07	-3.20E-07	-3.50E-07	-3.50E-07

Licensee Comments: none

Mitigating Systems Performance Index, Residual Heat Removal System



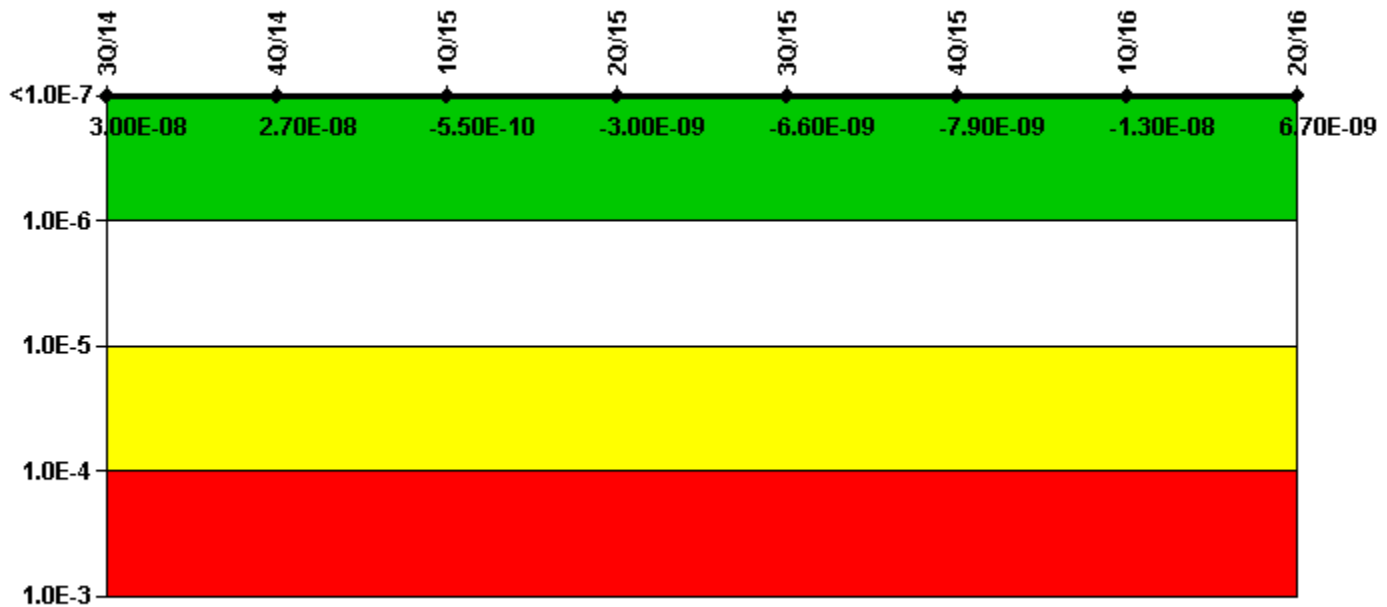
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Residual Heat Removal System	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
UAI (Δ CDF)	-1.07E-11	-1.07E-11	-1.06E-11	-1.07E-11	-1.07E-11	-8.56E-12	-3.88E-12	-3.47E-12
URI (Δ CDF)	-1.23E-11	-1.24E-11	-1.25E-11	-1.25E-11	-1.22E-11	-1.22E-11	-1.20E-11	-1.22E-11
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-2.30E-11	-2.30E-11	-2.30E-11	-2.30E-11	-2.30E-11	-2.10E-11	-1.60E-11	-1.60E-11

Licensee Comments: none

Mitigating Systems Performance Index, Cooling Water Systems



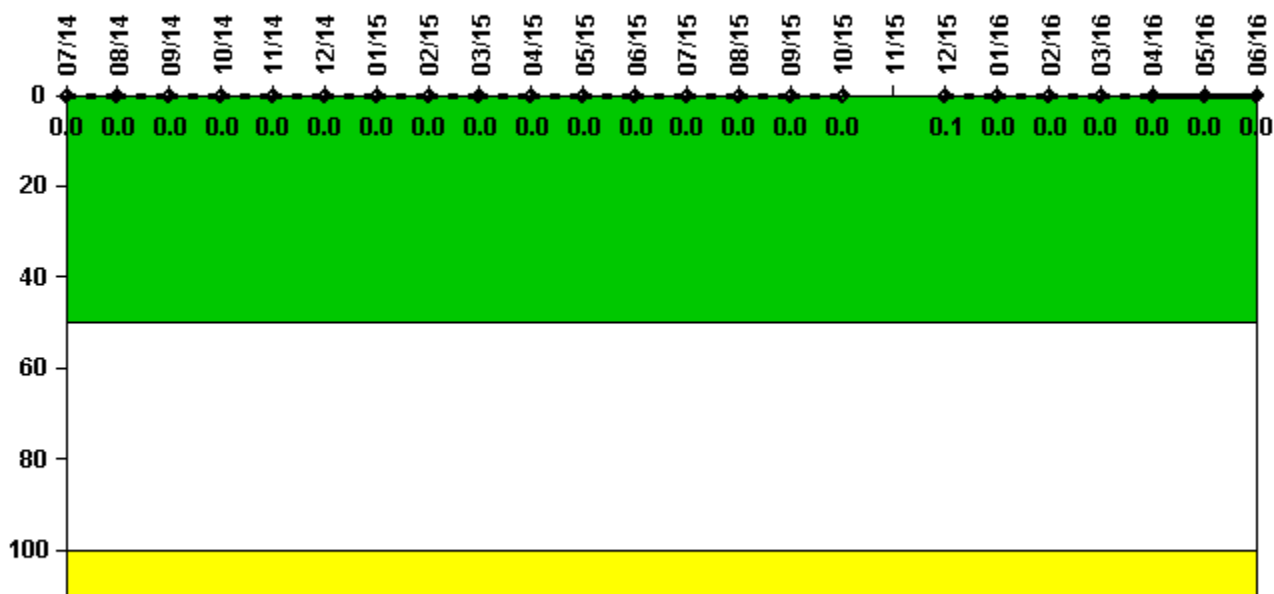
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Cooling Water Systems	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
UAI (Δ CDF)	7.34E-08	7.05E-08	4.28E-08	3.98E-08	3.61E-08	3.47E-08	3.52E-08	5.42E-08
URI (Δ CDF)	-4.30E-08	-4.31E-08	-4.34E-08	-4.28E-08	-4.27E-08	-4.26E-08	-4.81E-08	-4.75E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	3.00E-08	2.70E-08	-5.50E-10	-3.00E-09	-6.60E-09	-7.90E-09	-1.30E-08	6.70E-09

Licensee Comments: none

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

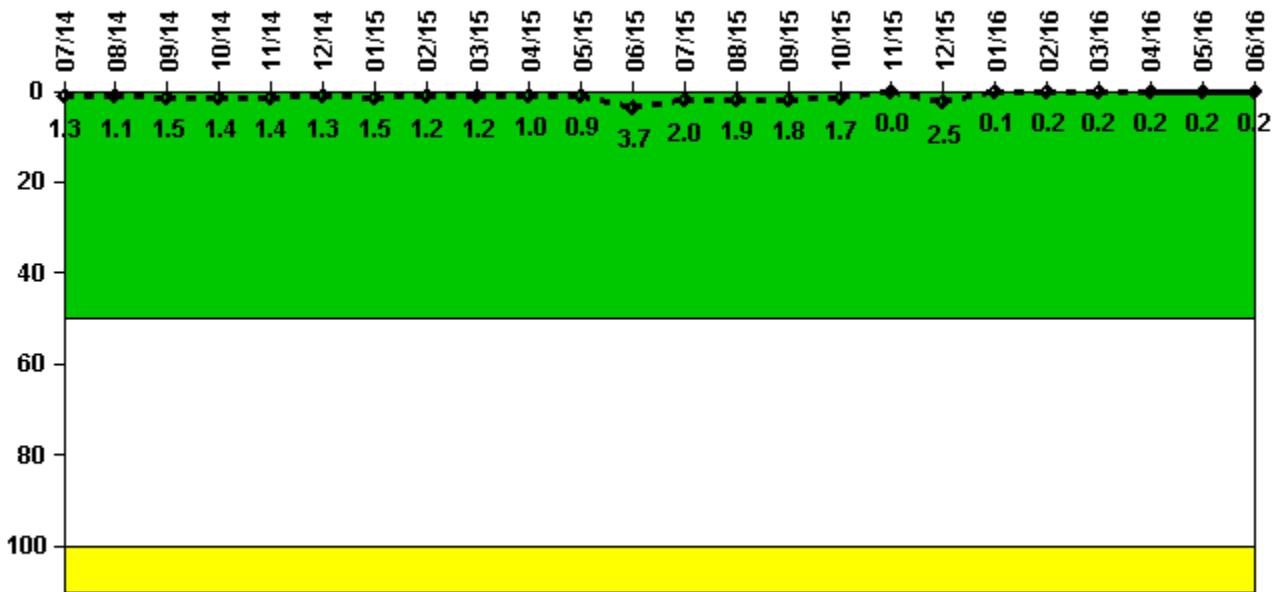
Notes

Reactor Coolant System Activity	7/14	8/14	9/14	10/14	11/14	12/14	1/15	2/15	3/15	4/15	5/15	6/15
Maximum activity	0.000195	0.000185	0.000195	0.000136	0.000208	0.000207	0.000151	0.000150	0.000162	0.000164	0.000151	0.000165
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Reactor Coolant System Activity	7/15	8/15	9/15	10/15	11/15	12/15	1/16	2/16	3/16	4/16	5/16	6/16
Maximum activity	0.000178	0.000183	0.000178	0.000182	N/A	0.000984	0.000106	0.000183	0.000185	0.000200	0.000216	0.000200
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	N/A	0.1	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



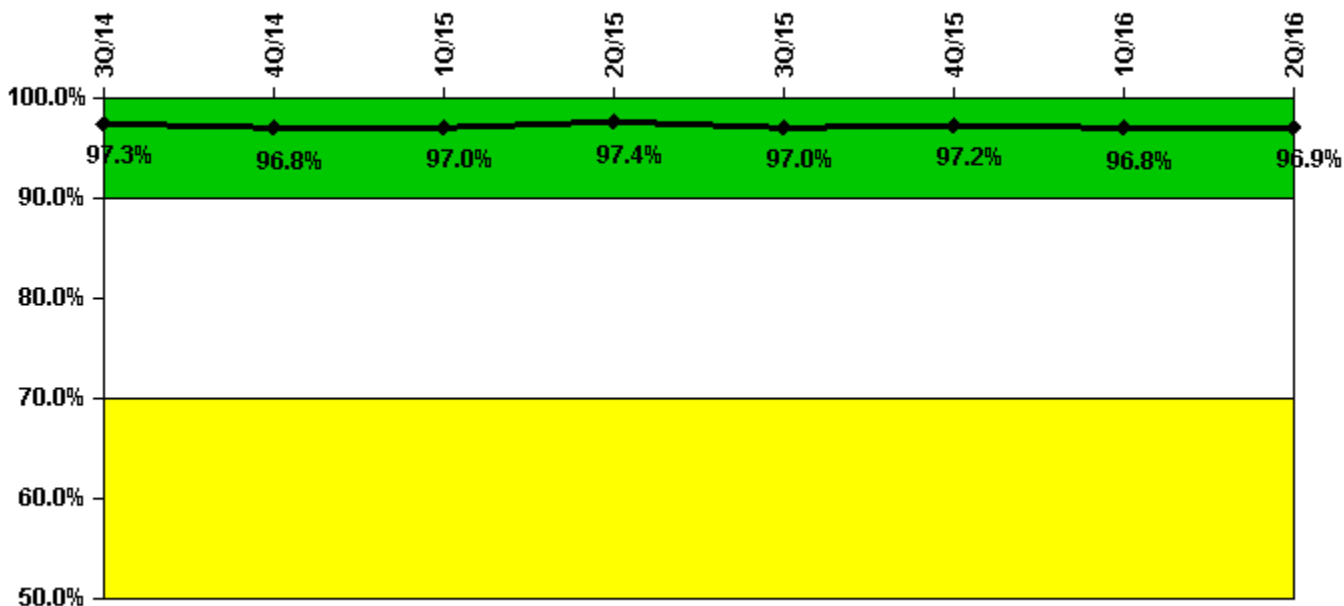
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	7/14	8/14	9/14	10/14	11/14	12/14	1/15	2/15	3/15	4/15	5/15	6/15
Maximum leakage	0.130	0.110	0.150	0.140	0.140	0.130	0.150	0.120	0.120	0.100	0.090	0.370
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	1.3	1.1	1.5	1.4	1.4	1.3	1.5	1.2	1.2	1.0	0.9	3.7
Reactor Coolant System Leakage	7/15	8/15	9/15	10/15	11/15	12/15	1/16	2/16	3/16	4/16	5/16	6/16
Maximum leakage	0.200	0.190	0.180	0.170	0	0.249	0.010	0.020	0.017	0.020	0.020	0.020
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	2.0	1.9	1.8	1.7	0	2.5	0.1	0.2	0.2	0.2	0.2	0.2

Licensee Comments: none

Drill/Exercise Performance



Thresholds: White < 90.0% Yellow < 70.0%

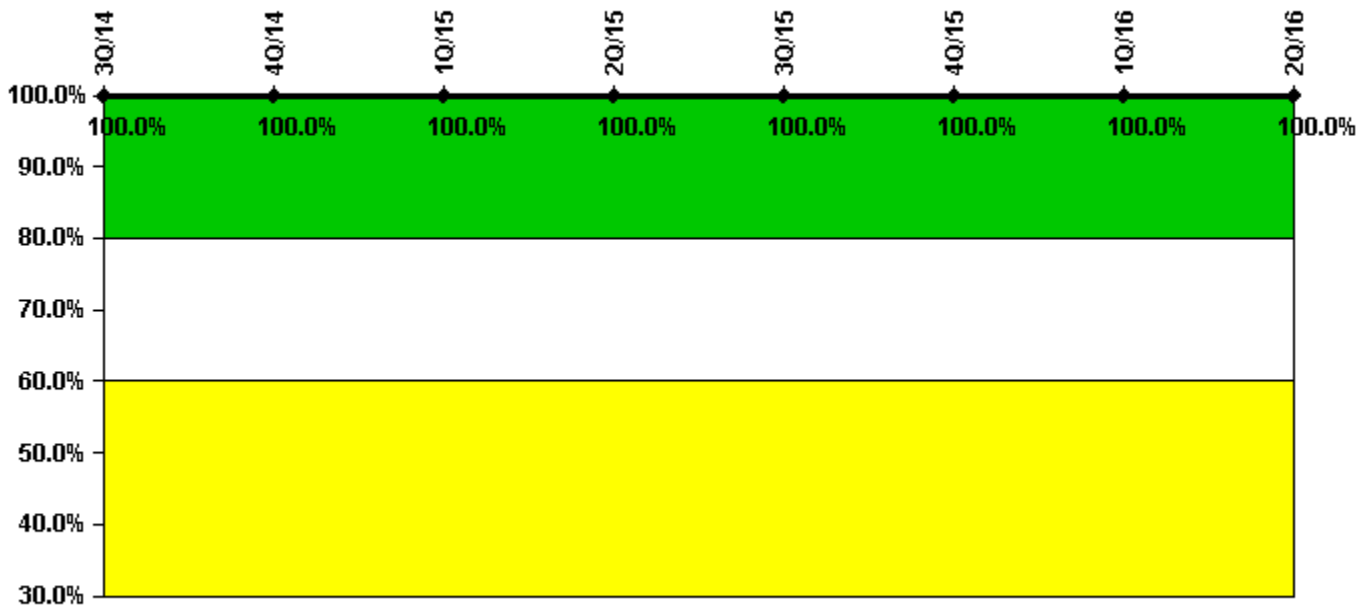
Notes

Drill/Exercise Performance	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
Successful opportunities	25.0	68.0	22.0	36.0	47.0	2.0	60.0	148.0
Total opportunities	27.0	72.0	22.0	36.0	49.0	2.0	62.0	151.0
Indicator value	97.3%	96.8%	97.0%	97.4%	97.0%	97.2%	96.8%	96.9%

Licensee Comments:

3Q/15: DEP miss in 2nd Month of 3rd quarter was re-evaluated based on discussion of similar issue identified in evaluated session in 2016 with NRC. The number of successful opportunities was increased to 22.

ERO Drill Participation



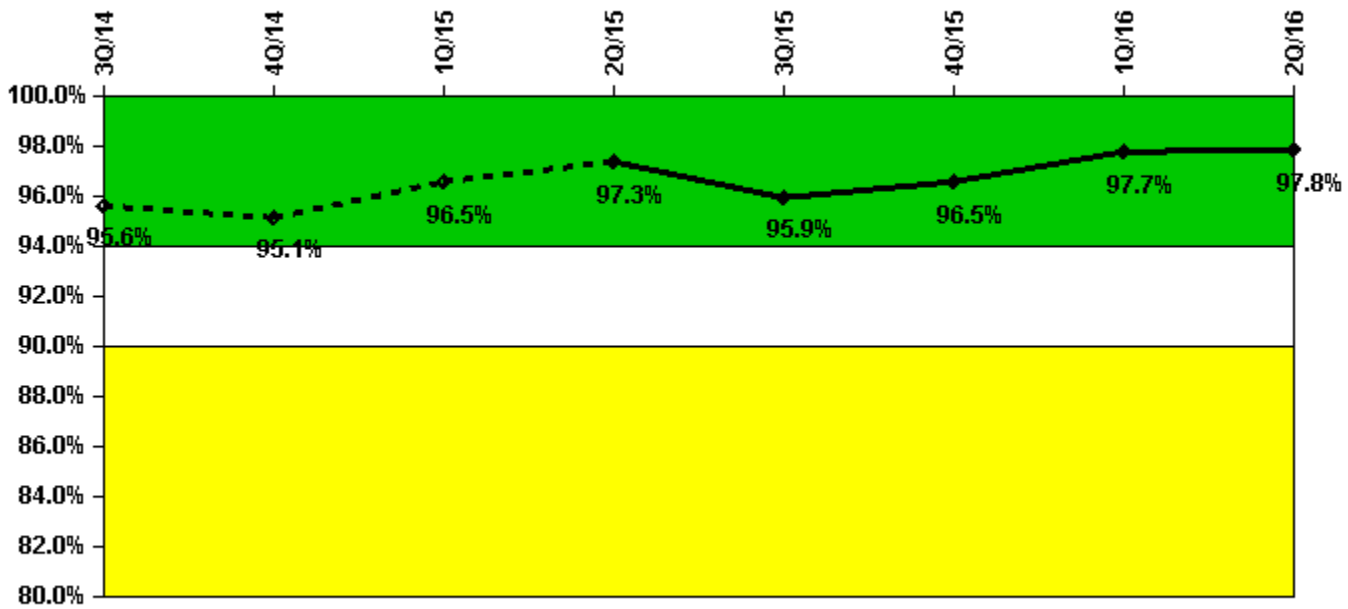
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
Participating Key personnel	110.0	113.0	115.0	113.0	104.0	100.0	98.0	99.0
Total Key personnel	110.0	113.0	115.0	113.0	104.0	100.0	98.0	99.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



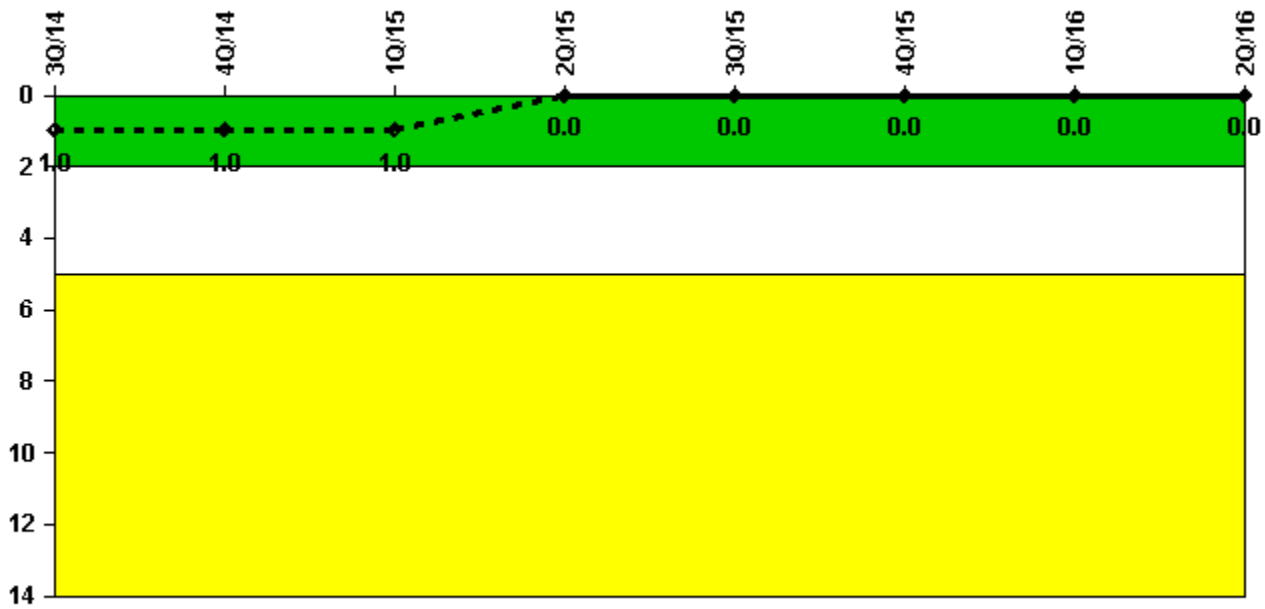
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
Successful siren-tests	424	429	416	435	401	438	437	438
Total sirens-tests	438	438	438	438	438	438	438	438
Indicator value	95.6%	95.1%	96.5%	97.3%	95.9%	96.5%	97.7%	97.8%

Licensee Comments: none

Occupational Exposure Control Effectiveness



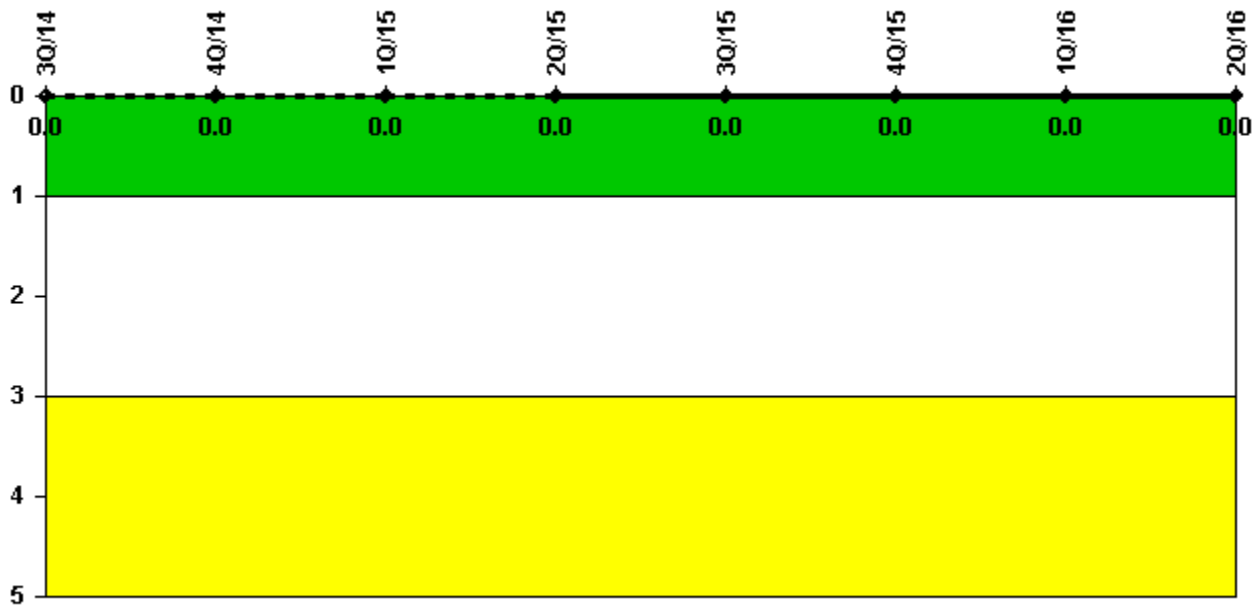
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	1	1	1	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page.

▲ [Action Matrix Summary](#) | [Inspection Findings Summary](#) | [PI Summary](#) | [Reactor Oversight Process](#)

Last Modified: July 25, 2016